## 25<sup>th</sup> Anniversary of the Scientific and Technological Achievement (STAA) Awards

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May 17, 2005

#### STAA Awards

- Promote and recognize scientific and technological achievement by EPA employees.
- STAA is the most prestigious of EPA's scientific award programs.



#### WHAT IS STAA?

- Agency-wide competition sponsored by ORD.
- Recognizes outstanding scientific and technological publications by EPA employees.
- Publications reviewed and evaluated by EPA's Science Advisory Board (SAB).
- SAB panel produces recommendations that ORD uses to select the actual awards.



#### Value of STAA

- Makes the general public more aware of the quality and depth of EPA science.
- Improves the credibility of the science underpinning Agency decisions on important issues.



#### CRITERIA FOR ELIGIBILITY

- Published in a peer-reviewed journal.
- Initiates or revises a scientific principle or procedure.
- Recognized as a major achievement within its field of study.
- EPA-wide so only EPA employees are eligible.
- All aspects of EPA science are eligible
  - Health and Ecological Effects
  - Environmental Exposure
  - Risk Assessment
  - Risk Management



#### **HOW DOES STAA WORK?**

- Four award levels:
  - Level I: \$5,000, Congratulatory Plaque,
     Letter of Appreciation, and Certificate
  - Level II: \$2,500, Letter, and Certificate
  - Level III: \$1,000, Letter, and Certificate
  - Honorable Mention: Letter and Certificate
- Monetary awards are distributed according to each author's contribution to the total effort.
- Very competitive!!!



#### STAA Statistics

YEAR	APPLICA- TIONS RECEIVED	LEVEL I (%)	LEVEL II (%)	LEVEL III (%)	HONORABLE MENTION (%)
2004	146	6 (4%)	13 (9%)	32 (22%)	37 (25%)
2003	136	7 (5%)	18 (13%)	29 (21%)	33 (24%)
2001/2002	140	4 (3%)	7 (5%)	26 (19%)	39 (28%)
AVERAGE	141	6 (4%)	13 (9%)	29 (21%)	36 (26%)

- •Less than 5% of the submitted papers receive a Level I award being honored today
- •Fewer than 10% receive a Level II award



#### WHO GOT THE 2005 AWARDS?

- Not restricted to ORD -- any paper is eligible.
- This year's Level I awards
  - Two are exclusively authored by Program Offices
    - OW and OECA
  - Two exclusively from ORD Laboratories and Centers
  - One includes an OW co-author,
  - One includes a co-author now employed by the State of Maine.
- Cross-section of EPA science:
  - Supporting regulatory decisions
  - Investigating health effects of arsenic and lead
  - Studying the ecological effects of ozone on trees and the function of isolated wetlands



# OTHER MEASURES OF QUALITY AND RELEVANCY

- EPA Science Achievement Awards
  - Provides a means of special recognition for employees who have excelled in scientific and technical disciplines.
  - Given in conjunction with the appropriate professional society or association in scientific or technical areas related to the broad field of environmental protection.
  - This year, SAA awards went to scientists and engineers from Regions 4 and 9, OAR, OPPTS, and ORD.



### Professional Society Recognition Examples

- Dr. Robert Zucker (NHEERL) has been elected as Secretary of the International Society of Analytical Cytology (ISAC)
- Michael Dellarco (NCEA) is President-elect of International Society of Exposure Analysis (ISEA).
- John C. Lipscomb (NCEA) received the Human Risk Assessment Paper of Year 2004 from the Editorial Board of the Journal of Human and Ecological Risk Assessment.



# Professional Society Recognition Examples

- Kevin M. Crofton (NHEERL) received the AstraZeneca Traveling Lectureship Award
  - Recognizing leadership in developing EPA's program to implement and validate high-throughput in vitro methods and alternative species as first-tier screening methods for developmental neurotoxicity testing.
- Glenn Suter (NCEA) received the prestigious SETAC Founders Award,
  - Given to a person whose outstanding career has made clearly identifiable contributions in the environmental sciences.
- Steve McCutcheon (NERL) received ASCE's 2004 Government Civil Engineer of the Year Award.
  - Steve also serves as ASCE's District 14 Director, representing Georgia, Alabama, Mississippi and Louisiana



## Post-Doctoral Recognition

- The Scientist recently published a list of the top 15 places for post-doctoral fellows to work.
- EPA's campus in RTP, North Carolina, was ranked as the top place for post-doctoral fellows to work in the country.
- EPA's North Carolina campus currently has a total of 79 postdoctoral employees in the life sciences, engineering and other disciplines.



#### Bibliometric Analysis - Particulate Matter Review

- > 1/3 of EPA PM publications are highly cited.
  - 321 (35.5%) are in the top 10% of highly cited publications
  - 74 (8.2%) are in the top 1%.
  - 13 (1.4%) are in the top 0.1%
  - 2 meet the top 0.01% threshold.
- Papers more highly cited than average.
  - Ratio of actual to expected cites is greater than 1.
- Nearly 1/3 in very high impact journals (JCR Impact Factor)
- 23 (2.5%) qualify as hot papers (ESI benchmark)
- Author self-citation rate is below average.

904 intramural and extramural papers, published from 1998 to 2005, were cited 9,578 times in the journals covered by Thomson's Web of Science. Of these 904 papers, 723 (80%) have been cited at least once in a journal. The analysis was completed using Thomson's Essential Science Indicators (ESI) and Journal Citation Reports (JCR) as benchmarks.



